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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,805	07/26/2001	Michael Heaton	60,130-1109; 01MRA0216	7507

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EXAMINER

TORRES, MELANIE

ART UNIT PAPER NUMBER

3683

DATE MAILED: 12/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/915,805

Applicant(s)

HEATON ET AL.

Examiner

Melanie Torres

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "duplex cam" assembly of claim 20 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: "a movable driveline component" and " a stationary driveline component" as claimed in claim 15.

Claim Rejections - 35 USC § 112

3. Claims 15-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear to the examiner which components are the "movable driveline component" and the "stationary driveline component" as claimed in claim 15. See

Art Unit: 3683

objection to the specification above. Claims 16-20 are rejected as they are dependent upon independent claim 15.

Further, re claim 15, on line 4, "another portion" is indefinite as the claim does not refer to a previous portion.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

5. Claims 1, 2, and 5-15, and 17-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Fleischer et al.

Re claims 1, 12, 15 and 17, Fleischer et al. discloses a parking brake comprising an engaging portion (11) that is moveable into a braking position (Fig. 1), a spring (13) that biases the engaging portion into the braking position and an electrically powered actuator (1) that moves the spring against the bias of the spring to thereby release the engaging portion from the braking portion.

Re claim 2, Fleischer et al. discloses wherein the actuator (1) comprises an electric motor.

Re claim 5, Fleischer et al. discloses an arm (8) associated with the actuator and a support (17) near one end of the arm, the support engaging the portion of the spring such that movement of the arm causes movement of the spring against the bias of the spring.

Re claims 7 and 13, Fleischer et al. discloses wherein the actuator (1) moves into a disengage position where the engaging portion is released from the braking position when the actuator is energized at a first level and the actuator releases the spring to bias the engaging portion into the braking position when the actuator is energized at a second level. (Figures 1 & 2)

Re claims 8 and 14, Fleischer et al. discloses wherein the second level includes the actuator (1) being de-energized.

Re claim 9, Fleischer et al. discloses a control switch that is actuatable by an operator of the vehicle and wherein the control switch controls the supply of electrical power to the actuator. (Column 6, lines 29 and 54)

Re claim 10, Fleischer et al. discloses an electronic controller that regulates power supplied to the actuator. This is an inherent feature as there would have to be a controller connected to any actuator in order for it to operate.

Re claim 18, Fleischer et al. discloses wherein the engaging portion (11) is at least partially supported on a transmission housing such that when the engaging portion moves into the braking position, the braking member and the associated moveable driveline component does not move relative to the transmission housing.

Re claim 19, Fleischer et al. discloses wherein the engaging portion (11) is at least partially supported on an axle assembly such that when the engaging portion moves into the braking position, the braking member remains stationary relative to the axle assembly. This feature would be inherent because the engaging portion (11) would have to be supported on an axle assembly in order to operate and the braking member is always a stationary assembly.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3683

7. Claims 3, 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fleischer et al.

Re claims 3 and 4, Fleischer et al. does not teach wherein the actuator comprises a servo motor or a linear actuator. It would have been obvious for the actuator of Fleischer et al. to have comprised a servo motor or a linear actuators as both are well known means of actuation in parking brakes.

Re claim 6, Fleischer et al. as modified teach wherein an arm (8) rotates about an axis of the arm and the rotation of the arm causes linear movement of a support (17).

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fleischer et al. as applied to claims 1 and 10 in view of Arnold et al.

Re claim 11, Arnold et al. teaches wherein the controller (100) automatically cuts off power to the actuator under selected conditions. (Column 4, lines 59-64) It would have been obvious to one of ordinary skill in the art at the time the invention was made to have automatically cut power to the actuator under selected conditions so as to maximize the efficiency of the system.

9. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fleischer et al. as applied to claim 15 above in view of Bae.

Re claim 16, Bae discloses wherein a braking member comprises a drum that is fixed from rotation on a driveline shaft. The examiner takes official notice that drums are well known fixed braking members in vehicles.

10. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bae in view of Fleischer et al.

Re claim 20, Bae discloses a moveable driveline component (27), a stationary, a braking member (1), and engaging portion (25), a spring (24), and a drum housing (21). However, Bae does not teach wherein the assembly comprises an electrically powered actuator that selectively move the spring and releases the engaging portion out of the braking position. Fleischer et al. teach wherein the assembly comprises an electrically powered actuator (1) that selectively move the spring and releases the engaging portion out of the braking position. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have had an electrically powered actuator in the assembly of Bae so as to avoid detrimental wear to the braking components.

Response to Arguments

11. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Torres whose telephone number is (703)305-0293. The examiner can normally be reached on Monday-Friday, 6:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on (703)308-3421. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-2571 for regular communications and (703)308-2571 for After Final communications.

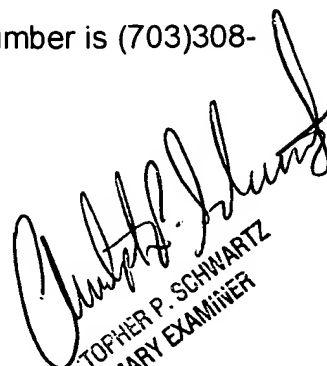
Application/Control Number: 09/915,805

Page 9

Art Unit: 3683

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1113.

MT
December 9, 2002


CHRISTOPHER P. SCHWARTZ
PRIMARY EXAMINER